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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,109	06/27/2001	Yoshio Kurokawa	8373.245US01	4901

7590

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EXAMINER

CHARLES, MARCUS

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

09/893,109

### Applicant(s)

KUROKAWA ET AL.

### Examiner

Marcus Charles

### Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

This action is responsive to the remarks filed 07-05-2005, which has been entered.

Claim 1 is currently pending.

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP (07-83290) in view JP (05-586). JP (07-83290) discloses a low noise roller chain comprising a inner and outer links (13/14) with bushing (12) and a pin (11), rigid roller elastic rollers (16) arranged in a zigzag pattern along the longitudinal direction of the chain (see fig.5). The elastic rollers is approximately 20% of an overall width of the roller assembly along the longitudinal axis of the of the roller assembly (see figs 2 and 4); as shown in figs 1-3, and 4-6, the thickness of the elastic roller is greater than that of the rigid roller (16) and having a uniform thickness through the width. JP (07-83290) is silent concerning the percentage ranges between the width of elastic roller and the roller assembly, and It should be noted that while the JP (07-83290) does not disclose any précised ranges or percentage ratio between the width and thickness of the elastic roller to the rigid roller either in the drawing or the specification. However, it appears that the width of the elastic roller to that of the rigid roller is about 13-45% and thickness of the elastic roller to the rigid roller is about 5-25%. Furthermore, the present disclosure does not disclose that such specific ranges solves any stated problems that would not otherwise be solved by ranges other than what is specified and it appears that the rollers of JP (07-83290) (which appears to be very close to that of the present invention) would perform

equally as well with the ranges being as close as they appear. In addition, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the size of the elastic roller of JP (07-83290) to obtain the claimed ratios ranges, since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or ranges involves only routine skill in the art. In re Aller, 105 USPQ 233. In addition, JP (07-83290) does not disclose the that the chain comprising two or more longitudinal chain portions of uniform lengths and the zigzag pattern of one portion is opposite in phase to the zigzag pattern of the adjacent portion. JP (05-586) discloses a roller chain with at least two adjacent portions (see attached drawing) each having elastic rollers in a zigzag manner such that the zigzag of one portion is opposite the zigzag of the adjacent portion in order to reduce noise and balance the damping the rattling effect of the chain and sprocket during inadvertent lateral and axial movements of the chain with the sprocket. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the chain of JP (07-83290) so that the zigzag pattern of one portion is opposite the zigzag pattern of an adjacent portion in view of JP (05-586) in order to reduce noise and balance the damping the rattling effect of the chain and sprocket during inadvertent lateral and axial movements of the chain with the sprocket.

### ***Response to Arguments***

3. Applicant's arguments filed 07-05-2005 have been fully considered but they are not persuasive. Applicant contended that the prior art fails to disclose two or more longitudinal chain portions of uniform lengths and the zigzag pattern of the rollers in the


longitudinal chain portions being opposite to the zigzag pattern of the rollers. As noted in the rejection filed 3/4/05, JP (05-586) clearly shows in fig. 2 and 4) that each of the longitudinal chain portions include zigzag pattern. For the reasons given above, the rejection is proper.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
Marcus Charles  
Primary Examiner  
44 3682  
9/18/05